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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,338	11/14/2006	Masashi Miwa	129543	3383

25944 7590 06/24/2010

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EXAMINER	
CHAU, LISA N	

ART UNIT	PAPER NUMBER
1785	

NOTIFICATION DATE	DELIVERY MODE
06/24/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
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Office Action Summary	Application No.	Applicant(s)	
	10/594,338	MIWA ET AL.	
	Examiner	Art Unit	
	Lisa Chau	1785	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *52,54-102,104,106,108 and 110-135* is/are pending in the application.

4a) Of the above claim(s) *54,55,62-102,104,106,108 and 110-135* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *52 and 56-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/3/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges canceled Claims 1-51, 53, 103, 105, 107, and 109, amended Claims 52, 57, and 60, and withdrawn Claims 54, 55, 62-102, 104, 106, 108, and 110-135 in the response filed on 4/13/10.

Response to Arguments

2. Applicant's arguments with respect to claims 52 and 56-61 have been considered but are moot in view of the new ground(s) of rejection.

35 U.S.C. 112, second paragraph rejections on Claims 60 and 107 are withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 52, 56, 60, and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5876518 ("Hasegawa et al.").

With regards to Claims 52 and 60, Hasegawa et al. teaches a rare-earth magnet comprising a Nd-Fe-B magnet body containing Nd rare-earth element and a protective layer comprising a first layer (rare earth element-rich layer) covering the magnet body and containing the neodymium rare-earth element, and a second layer (corrosion-resistant film layer) covering the first layer (rare earth element-rich layer) and containing

substantially no rare-earth element and containing Fe (Abstract, Col. 2: Lines 65 bridging to Col. 3: Lines 6, Col. 6: Lines 18-25, Col. 7: Lines 50-54, and Col. 8: Lines 4-8).

Examiner notes that the term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. In re Nehrenberg, 280 F.2d 161, 126 USPQ 38/3 (CCPA 1960). Examiner interprets the second layer (corrosion-resistant film layer) in Hasegawa et al. to contain substantially no rare-earth element because the term, substantially, does not constitute an absolute zero percentage of having a rare-earth element in that layer.

With regards to Claims 56, Hasegawa teaches its protective layer (rare earth element-rich layer and corrosion-resistant film) containing oxygen and an element derived from the magnet body (Col. 7: Lines 11-14, 50-54 and Col. 8: Lines 5-7).

With regards to Claims 61, Hasegawa et al. meets the total thickness limitation of its first and second layers as claimed (Col. 8: Lines 1-3 and Claim 3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5876518 ("Hasegawa et al.") as applied to Claim 52 above, and further in view of US Pub. No. 20020007875 ("Yamamoto et al.").

With regards to Claims 57 and 59, Hasegawa et al. teaches its magnet body containing a rare-earth element, neodymium, and a transition element other than the rare-earth element (Col. 6: Lines 16-54) and its second layer (corrosion-resistant film layer) containing Fe and oxygen (Abstract, Col. 6: Lines 16-25, and Col. 7: Lines 50-54).

Hasegawa et al. further teaches its first layer (rare earth element-rich layer) containing the rare-earth element, neodymium, in an amount of 80 weight % or more, but is silent on the teaching of its first layer (rare earth element-rich layer) containing a transition element and oxygen.

However, Yamamoto et al. teaches a R-Fe-B magnet comprising a Nd-Fe-B magnet alloy and rare earth and transition metal oxide (Abstract and [0031]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate transition metal oxide into Hasegawa et al.'s first layer (rare earth element-rich layer) in order to enhance magnetic properties (Abstract).

With regards to Claim 58, while Hasegawa et al. teaches the rare-earth element in the first layer (rare earth element-rich layer) are derived from the magnet body (Col. 8: Lines 4-11), it is silent on the teachings on the other elements in the protective layer being derived from the magnet body.

However, product-by-process claims are limited by and defined by the process and determination of patentability is based on the product itself. Regardless on how the elements in the protective layer are derived from, Hasegawa et al. in view of Yamamoto et al. have the same materials present for each layer as claimed.

7. Claims 52, 56, 60, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5876518 ("Hasegawa et al.") in view of JP 4328804 ("Tokuhara") provided in the IDS.

With regards to Claims 52 and 60, Hasegawa et al. teaches a rare-earth magnet comprising a Nd-Fe-B magnet body containing Nd rare-earth element and a protective layer comprising a first layer (rare earth element-rich layer) covering the magnet body and containing the neodymium rare-earth element and a second layer (corrosion-resistant film layer) covering the first layer (rare earth element-rich layer) and containing no rare-earth element (Col. 2: Lines 65 bridging to Col. 3: Lines 6, Col. 6: Lines 18-25, Col. 7: Lines 50-54, and Col. 8: Lines 4-8).

Hasegawa et al. does not teach its second layer containing Fe.

However, Tokuhara teaches a rare-earth magnet comprising a Fe-B-R magnet body wherein the surface of the body is covered by a Fe oxide (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include Fe in Hasegawa et al.'s second layer (corrosion-resistant film) to obtain a corrosion-proof permanent magnet (Abstract).

With regards to Claims 56, Hasegawa teaches its protective layer (rare earth element-rich layer and corrosion-resistant film) containing oxygen and an element derived from the magnet body (Col. 7: Lines 11-14, 50-54 and Col. 8: Lines 5-7).

With regards to Claims 61, Hasegawa et al. meets the total thickness limitation of its first and second layers as claimed (Col. 8: Lines 1-3 and Claim 3).

8. Claims 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5876518 ("Hasegawa et al.") in view of JP 4328804 ("Tokuhara") as

applied to Claim 52 above, and further in view of US Pub. No. 20020007875 ("Yamamoto et al.").

With regards to Claims 57 and 59, Hasegawa et al. in view of Tokuhara teaches its magnet body containing a rare-earth element, neodymium, and a transition element other than the rare-earth element (Col. 6: Lines 16-54) and its second layer (corrosion-resistant film layer) containing oxygen and Fe as set forth above (Col. 6: Lines 16-25 and Col. 7: Lines 50-54 in Hasegawa et al. and Abstract of Tokuhara).

Hasegawa et al. further teaches its first layer (rare earth element-rich layer) containing the rare-earth element, neodymium, in an amount of 80 weight % or more, but is silent on the teaching of its first layer (rare earth element-rich layer) containing a transition element and oxygen.

However, Yamamoto et al. teaches a R-Fe-B magnet comprising a Nd-Fe-B magnet alloy and rare earth and transition metal oxide (Abstract and [0031]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate transition metal oxide into Hasegawa et al.'s first layer (rare earth element-rich layer) in order to enhance magnetic properties (Abstract).

With regards to Claim 58, while Hasegawa et al. teaches the rare-earth element in the first layer (rare earth element-rich layer) are derived from the magnet body (Col. 8: Lines 4-11), it is silent on the teachings on the other elements in the protective layer being derived from the magnet body.

However, product-by-process claims are limited by and defined by the process and determination of patentability is based on the product itself. Regardless on how the

elements in the protective layer are derived from, Hasegawa et al. in view of Yamamoto et al. have the same materials present for each layer as claimed.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6326087 ("Nishiuchi et al.")

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Chau whose telephone number is (571)270-5496. The examiner can normally be reached on Monday-Friday 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272 - 1291. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LC/
Lisa Chau

/Holly Rickman/
Primary Examiner, Art Unit 1785